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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/710,809	08/04/2004	Ryan D. Tasma	SIE04 P-112A	4808
28101 7590 09/25/2007 VAN DYKE, GARDNER, LINN & BURKHART, LLP SUITE 207 2851 CHARLEVOIX DRIVE, S.E. GRAND RAPIDS, MI 49546			EXAMINER NICHOLSON III, LESLIE AUGUST	
			ART UNIT 3651	PAPER NUMBER
			MAIL DATE 09/25/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/710,809	TASMA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Leslie A. Nicholson III	3651	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 July 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 2-12,17-19,21-34 and 57-64 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2-12,17,18,33 and 57-63 is/are allowed.
- 6) ☒ Claim(s) 19,21-34 and 64 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>7/9/2007</u> .  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after allowance or after an Office action under *Ex Parte Quayle*, 25 USPQ 74, 453 O.G. 213 (Comm'r Pat. 1935). Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on 7/9/2007 has been entered.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 19,21-25,28,64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fultz USP 5,005,693 in view of Ito JP 2002326711.

Fultz discloses a roller conveyor comprising:

- A pair of opposite sidewalls (12,14)

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- At least two tandem zones (fig.2, separated by device of fig.8), each comprising a plurality of idler rollers (16) mounted to said sidewalls, each tandem zone comprising an article sensor (70)
- A transverse drive system comprising a transverse drive unit (24)

Fultz does not expressly disclose a transverse drive unit at each of said at least two tandem zones, wherein each of said transverse drive units comprises a motorized roller positioned generally transverse to said plurality of idler rollers and a plurality of drive members connected between said motorized roller and at least some of said plurality of idler rollers, each said motorized roller having an internal motor, said motorized rollers being independently operable in response to respective ones of said article sensors, wherein said transverse drive system is operable to accumulate articles on said rollers of said tandem zones in response to said article sensors.

It teaches a transverse drive unit at each at each tandem zone, wherein each of said transverse drive units comprises a motorized roller (10) positioned generally transverse to said plurality of idler rollers and a plurality of drive members (14) connected between said motorized roller and at least some of said plurality of idler rollers, each said motorized roller having an internal motor (16), said motorized rollers being independently operable in response to respective ones of said article sensors, wherein said transverse drive system is operable to accumulate articles on said rollers of said tandem zones in response to said article sensors (C4/L45-64,C5/L19-28) for the purpose of allowing each tandem zone to be operated independently.

At the time of invention it would have been obvious to one having ordinary skill in the art to employ a transverse drive unit at each at each tandem zone, wherein each of said transverse drive units comprises a motorized roller positioned generally transverse to said plurality of idler rollers and a plurality of drive members connected between said motorized roller and at least some of said plurality of idler rollers, each said motorized roller having an internal motor, said motorized rollers being independently operable in response to respective ones of said article sensors, wherein said transverse drive system is operable to accumulate articles on said rollers of said tandem zones in response to said article sensors, as taught by Ito, in the device of Fultz, for the purpose of allowing each tandem zone to be operated independently.

4. Claims 26,27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fultz USP 5,005693 in view of Ito JP 2002326711 further in view of Pelka PGPub 2002/0134647.

Fultz discloses all the limitations of the claim, but does not expressly disclose the idler rollers skewed with respect to the sidewalls.

Pelka teaches the idler rollers skewed with respect to the sidewalls (fig.1) for the purpose of singulating conveyed articles.

At the time of invention it would have been obvious to one having ordinary skill in the art to skew the idler rollers with respect to the sidewalls, as taught by Pelka, in the device of Fultz, for the purpose of singulating conveyed articles.

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5. Claims 29-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fultz USP 5,005,693 in view of Ito JP 2002326711 further in view of Kloosterhouse USP 4,962,841.

Fultz discloses all the limitations of the claim, but does not expressly disclose a right angle transfer unit having a plurality of belts mounted to a movable portion that is vertically movable via a rotational drive member, whereby rotation of said drive member causes translational movement of a camming member, wherein said rotational drive member is rotated via a rotational drive motor.

Kloosterhouse teaches a right angle transfer unit having a plurality of belts mounted to a movable portion that is vertically movable via a rotational drive member, whereby rotation of said drive member causes translational movement of a camming member, wherein said rotational drive member is rotated via a rotational drive motor (C3/L52-54) for the purpose of selectively diverting conveyed articles.

At the time of invention it would have been obvious to one having ordinary skill in the art to employ a right angle transfer unit having a plurality of belts mounted to a movable portion that is vertically movable via a rotational drive member, whereby rotation of said drive member causes translational movement of a camming member, wherein said rotational drive member is rotated via a rotational drive motor, as taught by Kloosterhouse, in the device of Fultz, for the purpose of selectively diverting conveyed articles.

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6. Claims 29,34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fultz USP 5,005,693 in view of Ito JP 2002326711 further in view of Itoh USP 2002/0134646.

Fultz discloses all the limitations of the claim, but does not expressly disclose a right angle transfer unit having a plurality of belts wherein the belts are drivable via a second motorized roller having an internal motor.

Itoh teaches a right angle transfer unit having a plurality of belts wherein the belts (115) are drivable via a second motorized roller having an internal motor (110) (¶0007) for the purpose of selectively diverting conveyed articles.

At the time of invention it would have been obvious to one having ordinary skill in the art to employ a right angle transfer unit having a plurality of belts wherein the belts are drivable via a second motorized roller having an internal motor, as taught by Itoh, in the device of Fultz, for the purpose of selectively diverting conveyed articles.

#### ***Allowable Subject Matter***

7. Claims 2-12,17,18,33,57-63 are allowed.

#### ***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leslie A. Nicholson III whose telephone number is 571-272-5487. The examiner can normally be reached on M-F, 8:30 AM - 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene Crawford can be reached on 571-272-6911. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

L.N.  
8/13/2007

  
GENE O. CRAWFORD  
SUPERVISORY PATENT EXAMINER